Merritt Parkway, Grumman Avenue Bridge Spanning the Merritt Parkway at the 19.07 mile mark Norwalk Fairfield County Connecticut HAER No. CT-96

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service U.S. Department of the Interior P.O. Box 37127 Washington, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

Merritt Parkway, Grumman Avenue Bridge

HAER No. CT-96

Location:

Spanning the Merritt Parkway at the 19.07 mile mark in Norwalk, Fairfield

County, Connecticut

UTM: 18.633895.4556775

Quad: Norwalk North, Connecticut

Construction Date:

1938

Engineer:

Connecticut Highway Department

Architect:

George L. Dunkelberger, of the Connecticut Highway Department, acted as head

architect for all Merritt Parkway bridges.

Contractor:

New Haven Construction Company

New Haven, Connecticut

Present Owner:

Connecticut Department of Transportation

Wethersfield, Connecticut

Present Use:

Used by traffic on Grumman Avenue to cross the Merritt Parkway

Significance:

The bridges of the Merritt Parkway were predominately inspired by the Art Deco and Art Moderne architectural styles of the 1930s. Experimental forming techniques were employed to create the ornamental characteristics of the bridges. This, combined with the philosophy of incorporating architecture into bridge

design and the individuality of each structure, makes them distinctive.

Historians:

Todd Thibodeau, HABS/HAER Historian

Corinne Smith, HAER Engineer

August 1992

For more detailed information on the Merritt Parkway, refer to the Merritt Parkway History Report, HAER No. CT-63.

LOCAL HISTORY

In 1640, Roger Ludlow acquired land along the east side of the Norwalk River from the Long Island Sound to twelve miles inland. A couple of months later Daniel Patrick, a friend of Ludlow, purchased a similar amount of acreage on the west side of the river. These two acquisitions encompassed all of present-day Norwalk.¹

Ten years passed between these purchases and settlement of the region. In 1650, Ludlow sold his land to residents of the Hartford Colony. That same year, these new owners moved to what is now East Norwalk, under the leadership of two surveyors, Richard Olmstead and Richard Webb. In 1651, Norwalk formed a town. The community gradually expanded as an agricultural and shipping center. At one point Norwalk included parts of Wilton, New Canaan, and Westport. By the beginning of the American Revolution, Norwalk included the districts of Norwalk, South Norwalk, East Norwalk, West Norwalk, Broad River, Silvermine, Winnipauk, and Cranbury.²

In summer 1779 the British burned more than 300 structures in the town. The community took several years to rebound from this loss, but by the early 1800s, Norwalk was again an expanding agricultural and shipping community. Larger scale industrial development commenced in 1848, when the New York, New Haven, and Hartford Railroad reached the Norwalk River. Norwalk became a hatmaking center. The Volk Hat Company employed more than 500 workers. Other substantial enterprises developed, including the Norwalk Lock Company, Norwalk Iron Works, and Roth and Goldschmidt

^{1----,} This Is Norwalk (Norwalk: League of Women Voters, 1963), 5.

²Samuel Richard Weed, <u>Norwalk After Two Hundred and Fifty Years</u> (South Norwalk: C. A. Freeman Publishers, 1901), 18-19.

Merritt Parkway, Grumman Avenue Bridge HAER No. CT-96 (page 3)

Corset Company. Fueling this development was the arrival of large numbers of Irish and German immigrants.³

Following World War I, Norwalk experienced another population boom, as many New Yorkers who had vacationed in Norwalk for years settled permanently and began to commute. These new arrivals eagerly awaited completion of the Merritt Parkway. After it was finished, the parkway helped to accelerate the residential development of the western sections of the community, especially Winnipauk and Cranbury. During World War II watchtowers were established on the Merritt to spot airplanes and relay the information to Mitchell Field on Long Island.⁴

BRIDGE CONSTRUCTION HISTORY

known as Grumman Hill. The Arute Brothers Construction Company of New Britain, Connecticut, received the contract to grade the Merritt Parkway from West Rocks Road, in Norwalk, to the Newtown Turnpike, in Westport (ConnDot project #180-54). While the Grumman Avenue Bridge is within this section of the Merritt, the grade separation and bridge contract went to the New Haven Construction Company of New Haven, Connecticut (ConnDot project #180-68). The bridge cost \$25,134 and was completed in 1938. The paving work for this region of the Merritt also extended from West Rocks Road

This Is Norwalk, 5-6.

Deborah Wing Ray and Gloria P. Stewart, Norwalk Being an Historical Account of That Connecticut Town, (Canaan, NH: Phoenix Publishing, 1979), 194, 200. This Is Norwalk, 6.

[&]quot;3000 Attend Merritt Parkway Opening; Hear Cross Voice Hope For Extension," Norwalk Hour, 30 June 1938, p. 1.

⁵Contract Card File, Map File and Engineering Records Department, Connecticut Department of Transportation, Wethersfield, CT.

to the Newtown Turnpike. This contract was awarded to the New Haven Construction Company (ConnDot project# 180-96). The Grumman Avenue Bridge has received little maintenance since it was built. Recently, a chain-link fence was installed across the deck railing.

BRIDGE DESCRIPTION

The Grumman Avenue Bridge is a single-span, reinforced- concrete, barrel-type rigid-frame bridge with a clear roadway 30' wide. The Merritt Parkway travels under the 63'-3" long span at a skew of 4°-57'-30". Parallel wing walls, 39'-5-1/2" long, form the approach for the underpass. The rigid-frame design allows the engineer to decrease the structural material at the center of the span, thus forming an arched opening. (See the Merritt Parkway History Report, HAER No. CT-63, for a more detailed description of the rigid-frame.) The intrados of the span rises over 4'-6" from the springline to the crown, while the extrados remains horizontal from knee to knee. The frame thickness at the crown is 21". The frame leg thickness increases from 3' at the base to 4'-6" at the knee. The exposed face of the legs remains vertical, and the hidden face slopes away from the roadway. The minimum clearance provided is 14' at a distance 20' perpendicular to the center of the roadway.

The architectural detailing of the Grumman Avenue Bridge utilizes precast panels and bands, tooled concrete, and a metal railing to reproduce the Connecticut coat of arms. At the top of each pylon is a 3"-thick scraffito panel with two griffins in white on a dark background. At the left hand pylons the griffins are holding a plaque with a tree, and at the right hand pylons the griffins are holding the coat of arms with the date 1937 below. Beneath each panel is a precast scraffito triangular molding with a rosette at the center. The triangular pattern is simplified when applied

Grumman Avenue Bridge, DOT #724; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

Merritt Parkway, Grumman Avenue Bridge HAER No. CT-96 (page 5)

near the top of the wing wall railing and across the top of the face of the frame leg. Four pilasters on the frame legs flank square panels of tooled concrete. Tooling has exposed the black aggregate in the concrete. The center panel contains a silhouette of the coat of arms formed by not tooling the concrete. On the construction drawings, the coat of arms also appears as a cast brass shield brazed to the steel discs at the center of X-shaped sections on the metal railing. The location of the coat of arms can be traced on each shield, but they are no longer there. Three sections comprise a railing panel. A chain-link fence runs the length of the bridge inside the railings.

Presently the concrete curb and the spandrels are spalling badly. Patches of paint occur all over the bridge to hide graffiti or repairs but do not match the concrete color.

BIBLIOGRAPHY

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- ----. This Is Norwalk. Norwalk: League of Women Voters, 1963.

Norwalk Hour. 1937-38.

- ------ Contract Card File. Map File and Engineering Records Department, Connecticut Department of Transportation: Wethersfield, CT. This includes construction drawings, copies of which are in the HAER field records.
- ------ Bridge Maintenance File. Engineering Department, Connecticut Department of Transportation: Newington, CT.

Merritt Parkway, Grumman Avenue Bridge HAER No. CT-96 (page 6)

PROJECT INFORMATION

This recording project was undertaken by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER) Division of the National Park Service, Robert J. Kapsch, Chief. The Merritt Parkway recording project was sponsored and funded by the Connecticut Department of Transportation (ConnDot) and the Federal Highway Administration.

The fieldwork, measured drawings, historical reports and photographs were prepared under the general direction of Eric N. DeLony, HAER Chief, and Sara Amy Leach, HABS Historian.

The recording team consisted of Jacqueline A. Salame (Columbia University), architect and field supervisor; Mary Elizabeth Clark (Pratt Institute) and B. Devon Perkins (Yale University), architectural technicians; Joanne McAllister-Hewlings (US/ICOMOS-Great Britain, University of Sheffield), landscape architect; Corinne Smith (Cornell University), engineer; Gabrielle M. Esperdy (City University of New York) and Todd Thibodeau (Arizona State University), historians; and Jet Lowe, HAER photographer.